



(C) WPI / DERWENT

AN - 1997-159099 [15]

AP - JP19950180206 19950717

CPY - MITC

DC - B02 D16

FS - CPI

IC - C12P17/02

MC - B06-A03 B14-H01 D05-C D05-H08

M2 - [01] D021 D024 D025 D026 D030 D220 G010 G019 G100 H4 H404 H463 H481 H8

J0 J014 J2 J221 J231 J261 J3 J331 J5 J561 M1 M123 M136 M210 M211 M240

M262 M281 M283 M312 M321 M332 M344 M349 M371 M391 M412 M511 M520 M533

M540 M720 M903 M904 N135 N136 N137 N161 N450 P633 Q233; 68515;

9715-08601-P

- [02] D021 D024 D025 D026 D030 D220 G010 G100 H4 H401 H461 H8 J0 J014

J2 J231 J262 M1 M123 M136 M210 M211 M240 M262 M283 M320 M412 M511 M520

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9715-08602-P

- [03] D021 D024 D025 D026 D030 D220 G010 G100 H4 H403 H404 H463 H464 H8

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N136 N137 N161 N450 P633 Q233; 68515; 9715-08603-P

- [04] D021 D024 D025 D026 D030 D220 F012 F013 F014 F015 F123 G010 G019

G100 H4 H405 H423 H461 H481 H5 H521 H7 H721 H8 J0 J014 J2 J221 J231

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M211 M214 M232 M240 M262 M283 M312 M321 M332 M344 M349 M371 M391 M412

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68515; 9715-08604-P

- [05] D021 D024 D025 D026 D030 D220 G010 G019 G100 H4 H404 H463 H481 H7

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Q233; 68515; 9715-08605-P

- [06] D021 D024 D025 D026 D030 D220 F012 F013 F014 F015 F123 G010 G019

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M240 M262 M281 M283 M312 M321 M332 M344 M349 M371 M391 M412 M511 M521

M533 M540 M720 M903 M904 N135 N136 N137 N161 N450 P633 Q233; 68515;

9715-08606-P

- [07] D021 D024 D025 D026 D030 D220 F012 F013 F014 F016 F123 G010 G019

G100 H4 H405 H423 H462 H481 H5 H521 H8 J0 J014 J2 J221 J231 J261 J3

J331 J5 J561 K0 L8 L817 L821 L831 M1 M123 M126 M136 M141 M210 M211

M240 M262 M281 M283 M312 M321 M332 M344 M349 M371 M391 M412 M511 M521

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9715-08607-P

- [08] G031 G034 G038 G039 G060 G750 M210 M211 M240 M283 M320 M415 M510

M520 M530 M541 M610 M720 M903 M904 N135 N136 N137 N161 N450 P633 Q233;

68858; 9715-08608-P

- [09] D021 D024 D025 D026 D030 D220 G010 G019 G100 H4 H403 H462 H481 H8

J0 J014 J2 J221 J231 J262 J3 J331 J5 J561 M1 M123 M136 M210 M211 M240

M262 M282 M283 M312 M321 M332 M344 M349 M371 M391 M412 M511 M520 M533

M540 M720 M903 M904 N135 N136 N137 N161 N450 P633 Q233; 68515; R18653-P

PA - (MITC) MITSUI PETROCHEM IND CO LTD

PN - JP9028392 A 19970204 DW199715 C12P17/02 007pp

PR - JP19950180206 19950717

XA - C1997-050823

XIC - C12P-017/02 ; (C12P-017/02 C12R-001/91)

AB - J09028392 Prepn. of taxane type diterpenes comprises culturing tissues  
and/or cells of a plant producing a taxane type diterpene in the

presence of a cpd. for increasing the intracellular calcium concn. and recovering the diterpenes from the cultured prod. and/or the culture medium.

- Also claimed is prepn. of the diterpenes which comprises culturing tissues and/or cells of a plant producing the diterpenes in the presence of a cpd. for activating protein kinase and recovering the diterpenes from the cultured prod. and/or culture medium.
- Pref. the cpd. for increasing the calcium concn. is a  $\text{Ca}(2+)$ -ATPase inhibitor, esp. one or more of vanadate, cyclopiazonic acid, 2,5-di(tert.-butyl)- 1,4-benzohydroquinone, thapsigargin and lanthanum cpds.. Pref. the concn. of the inhibitor is  $10^{-7}$  to  $10^{-3}$  M. Alternatively, the cpd. is a calcium ionophore, esp. one or more of calcium ionophore A23187 and its analogues, ionomycin, lasalocid (X-537A), prostaglandin B<sub>4</sub>, phosphatidic acid and 1,4,5-triphosphoinositol. Pref. the concn. of the ionophore is  $10^{-9}$  to  $10^{-6}$  M. Pref. the protein kinase activating cpd. is a phorbol ester. Pref. the concn. of the ester is  $10^{-9}$  to  $10^{-4}$  M. Pref. diterpenes comprise taxol, 10-deacetyltaxol, 7-epitaxol, baccatin III, 10-deacetyl baccatin III, 7-epibaccatin III, cephalomannin, 10-deacetylcephalomannin, 7-epicephalomannin, baccatin VI, taxol C, 10-deacetyltaxol C, taxagiphine, analogues of taxagiphine, taxane 1a, analogues of taxane, xylosyl cephalomannin and xylosyl taxol.

- USE/ADVANTAGE - The diterpenes are useful as drugs against ovary, breast and liver cancers. The methods permit mass prodn. of the plant metabolites.(Dwg.0/0)

C - C12P17/02 C12R1/91

CN - 9715-08601-P 9715-08602-P 9715-08603-P 9715-08604-P 9715-08605-P  
9715-08606-P 9715-08607-P 9715-08608-P R18653-P

IW - PREPARATION DI TERPENE ANTICANCER DRUG COMPRISE CULTURE TISSUE CELL  
PLANT PRODUCE TYPE DI TERPENE PRESENCE COMPOUND INCREASE INTRA  
CELLULAR CALCIUM CONCENTRATE

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CELLULAR CALCIUM CONCENTRATE

NC - 001

OPD - 1995-07-17

ORD - 1997-02-04

PAW - (MITC ) MITSUI PETROCHEM IND CO LTD

RRL - 68515 68858

TI - Prepn. of taxane di:terpene(s) used as anticancer drugs - comprises culturing tissues and/or cells of plant producing taxane type di:terpene in presence of cpd. for increasing intra-cellular calcium concn.